WA 2302 4a
6/21/90

Facility: Rhone-Poulenc

ID No. WAD009282302

Date of Inspection: June 20, 1990
Date of Report: June 21, 1990

Address: 9229 East Marginal Way South
Seattle, Washington 98108

Report Prepared by: Jack Boller, Environmental Protection Specialist
Washington Operations Office
EPA Region 10

Inspector: Jack Boller, EPA/WOO
Deborah Robinson EPA/WMB
Dave Lundstrom, Ecology/NWRO
Byung Maeng, Ecology/NWRO

Purpose:

This inspection was conducted to gather information on facility compliance with applicable regulations for management of hazardous waste under the Washington State and United States hazardous waste laws, and to provide EPA oversight of the state program.

General Facility Process Information:

Rhone-Poulenc is located in an industrialized area south of downtown Seattle along the Duwamish Waterway. The facility manufactures Vanillin from Lignon. Lignon is a by-product of the pulp and paper industry and is supplied to Rhone-Poulenc by the Georgia Pacific facility in Bellingham, Washington. The Rhone-Poulenc Seattle plant produces one quarter of the world's supply of Vanillin annually. The plant was formally owned and operated by Monsanto. Prior to 1976 a number of chemical products were manufactured at the site. Since 1976 only Vanillin has been produced there. Most of the wastes are not regulated by EPA, however they are regulated by the state as toxic based on the fish toxicity test. Three waste streams are regulated by EPA. Two of them are lab wastes (methylene chloride and solvent contaminated solids) and the third is strainer solids which is a calcium and sodium sulfite mixture high in copper. Wastes are sent offsite to Chem Security Systems and Chemical Processors.

Permits and Notification:

The facility filed a notification of hazardous waste activity and a part A permit application in 1980 as a generator and storage facility. A revised notification was filed on March 1, 1990 to update the waste generation list. The facility is currently not engaged in storage activity and is in the process of closing the storage unit.

Inspection:

On June 20, 1990 at 9:30 a.m. Dave Lundstrom, Byung Maeng, Deborah Robinson and I arrived at the Rhone-Poulenc facility in Seattle, Washington. Mr. Lundstrom was the lead inspector.

We entered the facility office and signed in. We were met by Sue Hays the Government Affairs Superintendent and Carie McNamee the Maintenance and Engineering Supervisor. We moved to a meeting room and began the inspection. Ms. Hays explained the company concerns regarding proprietary process information and asked inspectors to sign a prepared statement agreeing to treat in a confidential manner all information deemed to be proprietary by the company. After reading the statement and explaining EPA's confidentiallity process we determined that the statement did not restrict our ability to gather information or conduct the inspection and signed the agreement.

We were joined by Mr. Gary Podrabsky the plant manager. Mr. Podrabsky briefly described the plant process and waste streams. He asked to be briefed on our findings at the end of the inspection and left.

We began a file review. The waste analysis plan and contingency plan appeared to be complete but were both out of date and needed to be updated to show the proper facility name and to confirm phone numbers. No training records were being kept for some plant employees.

There was no inspection plan or log. Manifests and land disposal restriction notifications appeared to be in order. The facility is in the process of renegotiating the closure plan with Ecology due to the unexpected discovery of copper contamination around the closing storage unit.

We toured the facility. Numerous fire extinguishers were located around the site. We checked one and it was properly tagged and had been inspected in May, 1990. There was no waste in the storage area at the time of the inspection. Satellite accumulation areas were being operated at the lab. One for methylene chloride was outside and over 50 feet from the building. A second container for contaminated solids was outside the building approximately ten feet from the door. Strainer solids are collected in metal bins and transferred to roll-off containers for offsite shipment.

Following the site tour we returned to the office for a closing conference. Mr. Podrabsky joined us again. Mr. Lundstrom presented our findings and answered questions. We concluded the inspection and left the site at noon.

Conclusion:

The following deficiencies were noted:

1. Waste analysis plan was not current a violation of 40 CFR Part 265.13 and WAC 173-303-300.

2. Contingency plan was not current a violation of 40 CFR Subpart D and WAC 173-303-350.

3. Weekly inspections were not being done a violation of 40 CFR Part 265.15 and WAC 173-303-320.

4. Satellite accumulation areas were not at or near the point of generation or under the control of the operator a violation of 40 CFR Part 262.34 and WAC 173-303-200.

5. Training records are incomplete a violation of 40 CFR Part 265.16 and WAC 173-303-330.

With regard to EPA's oversite of Mr. Lundstrom no problems were noted. He was familiar with the site and well prepared. He conducted the inspection in a professional and efficient manner.

Date of Inspection
6/20/90

EXHIBIT IV-1

GENERAL SITE INSPECTION INFORMATION FORM

Rhone-Poulenc — 9229 East Marginal Way South
A. Site Name — B. Street (or other identifier)

Seattle — Wa — 98108 — King
C. City — D. State — E. Zip Code — F. County Name

G. Site Operator Information

1. Name Rhone-Poulenc (Mary Hays) — 2. Telephone Number (206) 764-4465
3. Street 9229 East Marginal Way S. — 4. City Seattle — 5. State Wa — 6. Zip Code 98108

H. Site Description

Chemical production plant

I. Type of Ownership

__1. Federal __2. State __3. County __4. Municipal X5. Private

J.

X1. Generator __2. Transporter __3. Treatment X4. Storage __5. Disposal

K. Regulatory Status

X1. Interim Status __3. Part B Permit Application Submitted
__2. Permitted Facility __4. Part B Permit Application in Preparation

L.

1. Principal Inspector Name: Jack Boller — 3. Organization: EPA/WOO
2. Title: EPS — 4. Telephone No. (area code and No.): (206) 753-9428 FTS 434-9428

M. Inspection Participants

1. Dave Lundstrom Ecology	6.
2. Byung Maeng Ecology	7.
3. Deborah Robinson Ecology	8.
4.	9.
5.	10.

EXHIBIT IV-2

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? X Yes __ No

   a. If yes, EPA I.D. No. WAD 0 0 4 2 8 2 3 0 2
   If no, explain. _____

2. Has facility received hazardous waste from a foreign source? __ Yes X No

   a. If yes, has it filed a notice with the Regional Administrator? ~~Yes~~ ~~No~~ N/A

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? X Yes __ No

   a. If yes, does it include:

   facility name incorrect.

   1. Parameters for which each waste will be analyzed? X Yes __ No
   2. Test methods used to test for these parameters? X Yes __ No
   3. Sampling method used to obtain sample? X Yes __ No
   4. Frequency with which the initial analyses will be reviewed or repeated? X Yes __ No
   5. (For offsite facilities) waste analyses that generators have agreed to supply? X Yes __ No
   6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:

      a. Procedures to be used to determine the identity of each movement of waste. X Yes __ No
      b. Sampling method to be used to obtain representative sample of the waste to be identified. X Yes __ No

4. Does the facility provide adequate security through:

   a. 24-hour surveillance system (e.g., television monitoring or guards)? X Yes __ No

   OR

(continued)

b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? X Yes __ No

Describe fence

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? X Yes __ No

Describe locked gate

General Inspection Requirements

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

a. Monitoring equipment? __ Yes X No
b. Safety and emergency equipment? __ Yes X No
c. Security devices: __ Yes X No
d. Operating and structural equipment? __ Yes X No
e. Types of problems of equipment:

1. Malfunction __ Yes X No
2. Operator error __ Yes X No
3. Discharges __ Yes X No

6. Does the owner/operator maintain an inspection log? __ Yes X No

a. If yes, does it include:

1. Date and time of inspection? __ Yes X No
2. Name of inspector? __ Yes X No
3. Notation of observations? __ Yes X No
4. Date and nature of repairs or remedial action? __ Yes X No

b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) __ Yes __ No

Personnel Training

7. Does the owner/operator maintain personnel training records at the facility? __ Yes X No
not for everyone

(continued)

How long are they kept? _____

a. If yes, do they include:

1. Job title and written job description of each position? __Yes N/A No
2. Description of type and amount of training? X Yes __No
3. Records of training given to facility personnel? X Yes __No

Requirements for Ignitable, Reactive, or Incompatible Waste

8. Does facility handle ignitable or reactive wastes? X Yes __No

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flame confined to specifically designated locations? X Yes __No

c. Are "No Smoking" signs posted in hazardous areas? X Yes __No

d. Are precautions documented (Part 264 only)? ~~Yes No~~ N/A

9. Check containers

a. Are containers leaking or corroding? __Yes X No

b. Is there evidence of heat generation from incompatible wastes? __Yes X No

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? __Yes X No

If yes, use narrative explanation sheet to explain.

(continued)

EXHIBIT IV-2 (continued)

2. Is the facility equipped with:

   a. Internal communication or alarm system? X Yes __ No

      1. Is it easily accessible in case of emergency? X Yes __ No

   b. Telephone or two-way radio to call emergency response personnel? X Yes __ No

   c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? X Yes __ No

   d. Water of adequate volume for hoses, sprinklers, or water spray system? X Yes __ No

      1. Describe source of water City of Seattle

3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? X Yes __ No

4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) X Yes __ No

5. In the case that more than one police or fire department might respond, is there a designated primary authority? X Yes __ No

   a. If yes, name primary authority Seattle

6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? X Yes __ No

   a. Are they readily available to all personnel? X Yes __ No

7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? X Yes __ No

8. If State or local authorities decline to enter, is this entered in the operating record? X Yes __ No

(continued)

EXHIBIT IV-2 (continued)

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? X Yes __ No

   a. If yes, is it a revised SPCC Plan? X Yes __ No

   b. Does contingency plan include:

      1. Arrangements with local emergency response organizations? X Yes __ No
      2. Emergency coordinators' names, phone numbers, and addresses? not current X Yes __ No
      3. List of all emergency equipment at facility and descriptions of equipment? X Yes __ No
      4. Evacuation plan for facility personnel? X Yes __ No

2. Is there an emergency coordinator on site or on call at all times? X Yes __ No

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? __ Yes X No

   a. If yes, does the owner/operator retain copies of all manifests? __ Yes __ No

      1. Are the manifests signed and dated and returned to the generator? __ Yes __ No N/A
      2. Is a signed copy given to the transporter? __ Yes __ No

2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? __ Yes X No

   a. If yes, is it accompanied by a shipping paper? __ Yes __ No

      1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? __ Yes __ No N/A
      2. Is a signed copy given to the transporter? __ Yes __ No

3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? __ Yes X No

   a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? __ Yes __ No

      1. If no, has Regional Administrator been notified? __ Yes __ No N/A

(continued)

EXHIBIT IV-2 (continued)

4. Does the owner/operator keep a written operating record at the facility? X Yes __ No

   a. If yes, does it include: not an offsite facility

   1. Description and quantity of each hazardous waste received? __ Yes / __ No
   2. Methods and dates of treatment, storage, and disposal? __ Yes / __ No
   3. Location and quantity of each hazardous waste at each location? __ Yes / __ No
   4. Cross-references to manifests/shipping papers? __ Yes / __ No
   5. Records and results of waste analyses? __ Yes / __ No
   6. Report of incidents involving implementation of the contingency plan? __ Yes / __ No
   7. Records and results of required inspections? __ Yes / __ No
   8. Monitoring or testing analytical data (Part 264)? __ Yes / __ No
   9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? __ Yes / __ No
   10. Notices of generators as specified in §264.12(b) (Part 264)? __ Yes / __ No

5. Does the facility submit a biennial report by March 1 every even-numbered year? X Yes __ No

   a. If yes, do reports contain the following information:

   1. EPA I.D. number? X Yes / __ No
   2. Date and year covered by report? X Yes / __ No
   3. Description/quantity of hazardous waste? X Yes / __ No
   4. Treatment, storage, and disposal methods? X Yes / __ No
   5. Monitoring data under §265.94(a)(2) and (b)(2) (Part 265)? X Yes / __ No
   6. Most recent closure and post-closure cost estimates? X Yes / __ No
   7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? X Yes / __ No
   8. Certification signed by owner/operator? X Yes / __ No

6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? __ Yes X No

   a. If yes, has he submitted an unmanifested waste report to the Regional Administrator? __ Yes / N/A

7. Does the facility submit to the Regional Administrator reports on releases, fires, and explosions; contamination and monitoring data; and facility closure? __ Yes / N/A

EXHIBIT IV-3

LAND DISPOSAL RESTRICTIONS CHECKLIST*

1. Are hazardous wastes land-disposed on site? ("Land disposal" includes placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, concrete vault, or bunker intended for disposal purposes; and placement in or on the land by means of open detonation and open burning where residues continue to exhibit hazardous characteristics). _Yes X No

   a. If yes, are one or more of the following circumstances true:

      1. Granted extension from effective date pursuant to §268.5? _Yes X No
      2. Granted exemption from a prohibition pursuant to a petition under §268.6? _Yes X No
      3. Disposing of soil or debris resulting from a CERCLA response action or a RCRA corrective action, which will not be prohibited until November 8, 1988? _Yes X No
      4. Facility is a small quantity generator of less than 100 kg of hazardous waste per month? _Yes X No

2. Are restricted wastes or residuals from treatment of a restricted waste diluted in any way prior to disposal? _Yes X No

3. Are there active surface impoundments used for treatment of hazardous wastes? _Yes X No

   a. If yes, does the unit's design and operation meet the requirements set forth in §268.4? _Yes _No N/A

4. Has the facility sought exemption from any prohibition under Subpart C of §268 for the disposal of a restricted hazardous waste? _Yes X No

   a. If yes, has the facility's demonstration included the required components (waste I.D., waste analysis, comprehensive environmental characterization of unit site, QA/QC plan, sampling, testing, modeling)? _Yes _No N/A

5. Has the facility determined whether it generates a restricted waste through waste analysis? X Yes _No

   a. If yes, is the facility, in fact, handling a restricted waste(s)? X Yes _No

(continued)

b. If yes, does the restricted waste require treatment? X Yes __ No

c. If yes, has the generator notified the treatment facility in writing, and does the notification include all required components ([PA hazardous waste number, corresponding treatment standard, manifest number of shipment)? X Yes __ No

6. Does the facility handle EPA Hazardous Waste Nos. F001 through F005 (solvent wastes)? X Yes __ No

a. If yes, do any of the following conditions apply:

1. The generator of the solvent waste is a small quantity generator (not more than 1000 kg/month)? __ Yes X No
2. The solvent waste is generated from a CERCLA response corrective action? __ Yes X No
3. The solvent waste is a solvent-water mixture, solvent containing sludge, or Solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F00L through F005 solvent constituents. __ Yes X No

b. If no, have any of these restricted wastes been land-disposed (except in an injection well) since November 8, 1986? __ Yes X No

7. Does the facility handle EPA Hazardous Waste Nos. F020, F021, F023, F026, F027, or F028 (dioxincontaining wastes)? __ Yes X No

a. If yes, do any of the following conditions apply:

1. Wastes are treated to meet standards of Subpart D of §268? __ Yes __ No
2. Wastes are disposed of at a facility that has been granted a petition? __ Yes __ No
3. An extension has been granted? __ Yes __ No

N/A

b. If no, will these restricted wastes be land disposed after November 8, 1988? __ Yes __ No

8. Are restricted wastes being treated? __ Yes X No

a. If yes, have any of their associated hazardous constituents exceeded the "Constituent in Waste Extract" (CWE) levels? __ Yes __ No N/A

*See OSWER Dir. No. 9938.1A (LDR Inspection Manual) for more detailed guidance!

EXHIBIT IV-4

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No? X Yes __ No

   a. If yes, EPA I.D. No. WAD 009 282302

Section B - Manifest

1. Does generator ship waste offsite? X Yes __ No

   a. If no, do not fill out Sections B and D.

   b. If yes, identify primary offsite facility(s). Use narrative explanation sheet. Chem Security Chem pro

2. Does generator use manifest? X Yes __ No

   a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? __ Yes __ No

      1. If yes, does generator indicate this when sending waste to a TSD facility? __ Yes __ No N/A

   b. If yes, does manifest include the following information?

      1. Manifest document No. X Yes __ No

      2. Generator's name, mailing address, telephone No. X Yes __ No

      3. Generator EPA I.D. No. X Yes __ No

      4. Transporter Name(s) and EPA I.D. No.(s) X Yes __ No

      5. a. Facility name, address, and EPA I.D. No. X Yes __ No
         b. Alternate facility name, address, and EPA I.D. No. X Yes __ No
         c. Instructions to return to generator if undeliverable X Yes __ No

      6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) X Yes __ No

(continued)

EXHIBIT IV-4 (continued)

7. Emergency information (optional) (special handling instructions, telephone No.) — X Yes __ No

8. Is the following certification on each manifest form? — X Yes __ No

   This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? — X Yes __ No

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? — X Yes __ No
   2. Who signed for generator?

   Name _____ Title _____

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? — X Yes __ No
   2. Who signed and dated for transporter?

   Name _____ Title _____

c. Does generator retain one copy of manifest signed by generator and transporter? — X Yes __ No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? — X Yes __ No

e. Does generator retain copies for 3 years? — X Yes __ No

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? — X Yes __ No

   a. If yes, list waste and quantities (include EPA Hazardous Waste No.) F003

(continued)

EXHIBIT IV-4 (continued)

2. Does generator generate solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) X Yes __ No

   a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) Copper Wastes

   b. Does generator determine characteristics by testing or by applying knowledge of processes? testing

      1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? X Yes __ No

         a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? X Yes __ No

   a. If yes, did generator test all wastes to determine nonhazardous characteristics? X Yes __ No

      1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? X Yes __ No

2. a. Are containers to be shipped leaking or corroding? ~~X~~ Yes X No

   b. Use sheet to describe containers and condition.

   c. Is there evidence of heat generation from incompatible wastes in the containers? __ Yes X No

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? X Yes __ No

4. Does generator mark each package in accordance with 49 CFR 172? X Yes __ No

(continued)

EXHIBIT IV-4 (continued)

5. Is each container of 110 gallons or less marked with the following label? X Yes __ No

   Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest policy or public safety authority or the U.S. Environmental Protection Agency.

   Generator name(s) and address(es) _____

   _____

   Manifest document No. _____ _____

6. Does generator have placards to offer to transporters? X Yes __ No

7. Accumulation time

   a. Are containers used to temporarily store waste before transport? X Yes __ No

      1. If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time) X Yes __ No

   b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) X Yes X No

      2. If yes, with what frequency? _____

   c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) X Yes __ No

NOTE: If tanks are used, fill out checklist for tanks.

   d. Are the containers labeled and marked in accordance with Section D-3, -4, and -5 of this form? X Yes __ No

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

   e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) X Yes __ No

8. Describe storage area. Use photos and narrative explanation sheet.

(continued)

EXHIBIT IV-4 (continued)

Section E - Recordkeeping and Records

1. Does generator keep the following reports for 3 years?

a.	Manifests and signed copies from designated facilities	X Yes ___ No
b.	Annual reports	X Yes ___ No
c.	Exception reports	X Yes ___ No
d.	Test results	X Yes ___ No

2. Where are the records kept (at facility or elsewhere)? at facility

3. Who is in charge of keeping the records?

Name Mary Hays Title _____

Section F - Special Conditions

1. Has generator received from or transported to a foreign source any hazardous waste? ___ Yes X No

a.	If yes, has he filed a notice with the Regional Administrator?	___ Yes / No
b.	Is this waste manifested and signed by a foreign cosignee?	___ Yes / No
c.	If generator transported wastes out of the country, has he received confirmation of delivered shipment?	___ Yes / N/A

EXHIBIT IV-6

CONTAINERS CHECKLIST

Section A - Use and Management

1. Are containers in good condition? X Yes __ No

Section B - Compatibility of Waste With Container

1. Is container made of a material that will not react with the waste which it stores? X Yes __ No

Section C - Management of Containers

1. Is container always closed while holding hazardous waste? X Yes __ No
2. Is container handled so that it will not be opened, handled, or stored in a manner which may rupture it or cause it to leak? X Yes __ No

Section D - Inspections

1. Does owner/operator inspect containers at least weekly for leaks and deterioration? __ Yes X No

Section E - Containment (Part 264)

1. Do container storage areas have a containment system? X Yes __ No

Section F - Ignitable and Reactive Waste

1. Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines? X Yes __ No

Section G - Incompatible Waste

1. Are incompatible wastes or materials placed in the same containers? __ Yes X No
2. Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste? X Yes __ No

(continued)

EXHIBIT IV-6 (continued)

3. Are incompatible hazardous wastes separated from each other by a berm, dike, wall, or other device? X Yes __No

Section H - Closure (Part 264)

1. At closure, were all hazardous wastes and associated residues removed from the containment system? __Yes __No N/A

WA 2302 4a

OSWER 9938.1

Inspector: Jim Pankanin
Address: EPA Region 10 /ESD
Seattle WA 9810
Telephone No: 206 442-8561

DRAFT
RCRA LAND RESTRICTION F-SOLVENT
GENERATOR CHECKLIST

I. HANDLER IDENTIFICATION

Rhone-Poulenc, Inc. — 9229 E. Marginal Way
A. Handler Name — B. Street (or other identifier)

Seattle — WA — 98108 — King
C. City — D. State — E. Zip Code — F. County Name

Vanillin Manufactuer
G. Nature of Business; Identification of Operations

WAD 009282302
H. EPA ID #

Gary Podrabsky (206) 764-4450
I. Handler Contact (Name and Phone Number)

II. GENERATOR COMPLIANCE

A. F-Solvent Identification

1. Does the handler generate the following wastes?

a. F001 ___ Yes X No
b. F002 X Yes ___ No
c. F003 ___ Yes X No

If an F003 wastestream listed solely for ignitability has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? ___ Yes X No

d. F004 ___ Yes X No
e. F005 ___ Yes X No

2. Source of the above: Form 8700-12 ___; Part A ___; Part B ___; other (specify) Annual Report and manifest.

Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A. Note concerns below: _____

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

B. BDAT Treatability Group - Treatment Standards Identification — Comments

1. Did the generator correctly determine the appropriate treatability group [268.41] of the waste (Wastewaters containing solvents, pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?

X Yes ___ No

C. Waste Analysis

1. Did the generator determine whether the waste exceeds treatment standards based on [268.7(a)]:

a. Knowledge of wastes — X Yes ___ No

b. TCLP — ___ Yes X No

c. Other (specify)_____

If knowledge, note how this is adequate:
Use pure methylene chloride for chemical extract. Excess is primarily spent solvent.

If determined by TCLP, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: N/A

Note any problems:_____

d. Were wastes tested using TCLP when a process or wastestream changed?

___ Yes ___ No N/A

2. Did the F-solvent wastes exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

X Yes ___ No
___ Some

3. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [268.3]

___ Yes X No

D. Management

1. Onsite management

a. Were F-solvent wastes managed onsite?

X Yes ___ No Satellite accumulation.

If yes, answer 1(b) and (c); if no, answer 2.

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

b. For wastes that exceed treatment standards, was treatment, storage, and/or disposal conducted? ___Yes _X_No

Comments: Only < 90 day storage.

If yes, TSDF Checklist must be completed.

c. Are test results maintained in the operating record [264.74(b)3/265.73(b)(3)]? ___Yes ___No N/A

No test results. Utilize process knowledge.

2. **Offsite Management**

a. **If F-solvent wastes exceed treatment standards, did generator provide treatment facility [268.7(a)(1)]:**

(i) EPA waste number? ___Yes ___No

(ii) Applicable treatment standard? ___Yes ___No

(iii) Manifest number? ___Yes ___No

(iv) Waste analysis data, if available? ___Yes ___No

At the time of the inspection, the facility representatives were not aware of this requirement. I explained what was required for F wastes. On 4/4/88, Sue Hayes of Rhone Poulenc called me and said that the required notification was sent to the receiving facility (Chem-Pro) along with the manifest. Sue was not present on the day of my inspection.
J. Pankanin

Identify offsite treatment facilities Chem-Pro

b. **If F-solvent wastes did not exceed treatment standards, did generator provide the disposal facility [268.7(a)(2)]:**

(i) EPA Hazardous waste number? ___Yes ___No

(ii) Applicable treatment standard? ___Yes ___No

(iii) Manifest number? ___Yes ___No

(iv) Waste analysis data, if available? ___Yes ___No

(v) Certification that waste meets treatment standards? ___Yes ___No

N/A

Identify land disposal facilities receiving the BDAT certified wastes _____

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

c. If waste is subject to nationwide variance [268.30] (e.g., solvent-water mixtures less than 1%), case-by-case extension [268.5] or petition [268.6] does generator provide notice to disposer that waste is exempt from land disposal restrictions [268.7(a)(3)]?

Comments

___Yes ___No N/A

E. Storage of F-Solvent Waste

1. Was F-solvent waste stored for greater than 90 days (after variance 180/270 days for SQG) [268.50(a)(1)]?

___Yes X No

If yes, was facility operating as a TSD under interim status or final permit? ___Yes ___No N/A

If yes, TSDF Checklist must be completed.

F. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? ___Yes X No

If yes, list type of treatment unit and processes

_____
_____
_____

If the residuals from a RCRA-exempt treatment unit are above the treatment standards, the owner/operator is considered a generator of restricted waste. The inspector should determine whether the generator requirements, particularly waste identification requirements, have been met for the treatment residuals.

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

APPENDIX A

Comments

SOLVENT IDENTIFICATION CHECKLIST

1. Does the handler generate any of the following F001 constituents (i.e., spent halogenated solvents used in degreasing) as a result of being used in the process either in pure form or commercial grade?

tetrachloroethylene	___Yes	_/_No
trichloroethylene	___Yes	_/_No
methylene chloride	___Yes	_/_No
1,1,1-trichloroethane	___Yes	_/_No
carbon tetrachloride	___Yes	_/_No
chlorinated fluorocarbons	___Yes	_/_No

2. Does the handler generate any of the following F002 constituents (i.e., spent halogenated solvents) as a result of being used in the process either in pure form or commercial grade?

tetrachloroethylene	___Yes	_/_No
trichloroethylene	___Yes	_/_No
methylene chloride	_X_Yes	___No
1,1,1-trichloroethane	___Yes	_/_No
chlorobenzene	___Yes	_/_No
trichlorofluoromethane	___Yes	_/_No
1,1,2-trichloro-1,2,2-trifluoroethane	___Yes	_/_No
ortho-dichlorobenzene	___Yes	_/_No

Analytical Chemistry Use.

3. Does the handler generate any of the following F003 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

xylene	___Yes	_/_No
acetone	___Yes	_/_No
ethyl acetate	___Yes	_/_No
ethyl benzene	___Yes	_/_No
ethyl ether	___Yes	_/_No
methyl isobutyl ketone	___Yes	_/_No
n-butyl alcohol	___Yes	_/_No
cyclohexanone	___Yes	_/_No
methanol	___Yes	_/_No

If the F003 wastestream has been mixed with a solid waste, does the resultant mixture exhibit the ignitability characteristic? ___Yes ___No N/A

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

4. Does the handler generate any of the following F004 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

Comments

cresols and cresylic acid	___Yes	___No
nitrobenzene	___Yes	___No

5. Does the handler generate any of the following F005 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

toluene	___Yes	___No
methyl ethyl ketone	___Yes	___No
carbon disulfide	___Yes	___No
isobutanol	___Yes	___No
pyridine	___Yes	___No

6. Are any of the constituents listed in the questions 1-5 used for their "solvent" properties -- that is to solubilize (dissolve) or mobilize other constituents? The following questions will be helpful in confirming this determination.

(a) Chemical carriers? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

(b) Degreasing/cleaning? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

(c) Diluents? ___Yes ___No

If the answer is yes, list the constituents.

_____
_____

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

(d) Extractants? ___Yes X No Comments

If the answer is yes, list the constituents. Except in laboratory. Methylene chloride

_____
_____

(e) Fabric scouring? ___Yes X No

If the answer is yes, list the constituents.

_____
_____

(f) Reaction and synthesis media? ___Yes X No

If the answer is yes, list the constituents.

_____
_____

If questions 1-6 led the inspector to believe that the waste may be an F-solvent, answer question 7.

7. Are any of the above constituents spent solvents? A solvent is considered "spent" when it has been used and is no longer used without being regenerated, reclaimed, or otherwise reprocessed. X Yes ___No

8. If the waste is a mixture of constituents as determined in questions 1-7, answer this to determine whether it is a "solvent mixture" covered by the listings.

   If the wastestream is mixed and contains more than one of the F001-F005 constituents listed in questions 1-5 (by volume), give the concentration before use of all the constituents in the solvent mixture/blend. For example:

   5% methylene chloride
   2% trichloroethylene
   25% 1,1,1-trichloroethane
   68% mineral spirits
   100%

   If the wastestream is a mixture containing a total of 10% or more (by volume) of one or more of the F001, F002, F004, or F005 listed constituents before use, it is a listed waste.

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

With respect to the F003 solvent wastes, if, before use, the wastestream is mixed and contains only F003 constituents, it is a listed waste. For example:

33%	acetone
16%	methanol
51%	ethyl ether
100%	

If the wastestream is a mixture containing F003 constituents and a total of 10% or more of one or more of the F001, F002, F004, and F005 listed constituents before use, it is a listed waste.
For example:

50%	xylene	F003
12%	TCE	F001
38%	mineral spirits	
100%		

If in light of the above, the handler appears to be generating F001-f005 hazardous wastes, refer this facility to the enforcement official for follow-up actions verifying the use of solvents at the facility.

APPENDIX B
TREATMENT STANDARDS FOR F-SOLVENTS

F001-F005 SPENT SOLVENTS	CONCENTRATION (IN MG/L) WASTEWATERS	OTHER WASTES
Acetone	0.05	0.59
N-butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	.05	.96
Chlorobenzene	.15	.05
Cresols (and cresylic acid)	2.82	.75
Cyclohexanone	.125	.75
1,2-dichlorobenzene	.65	.125
Ethyl acetate	.05	.75
Ethyl benzene	.05	.053
Ethyl ether	.05	.75
Isobutanol	5.0	5.0
Methanol	.25	.75
Methylene chloride	.20	.96
Methylene chloride (from the pharmaceutical industry)	12.7	.96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
Nitrobenzene	0.66	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,2,2-Trichloro 1,2,2-trifluoroethane	1.05	0.96
Trichloroethylene	0.062	0.091
Trichlorofluoromethane	0.05	0.96
Xylene	0.05	0.15